

SPECIFICATION AMENDMENTS

Please replace paragraph [0020] with the following amended paragraph:

[0020] Throughout this specification, several terms of art are used. These terms are to take on their ordinary meaning in the art from which they come, unless specifically defined herein or the context of their use would clearly suggest otherwise. A “cache” is defined herein as a buffer used to speed up data retrieval. A cache may be established ~~with in~~ within volatile memory (e.g., random access memory) or within non-volatile memory (e.g., hard disk).

Please replace paragraph [0022] with the following amended paragraph:

[0022] Hybrid-cache 110 caches (i.e., buffers) data received from one or more data sources 130. In turn, hybrid-cache 110 may provide the cached data to data consumers 135 more quickly than if the data was directly obtained from data sources 130. As such, the more data buffered within hybrid-cache 110, the more likely ~~[[a]]~~ requests for data issued by data consumers 135 may be quickly serviced from cached copies of the data within hybrid-cache 110, as opposed from data sources 130. Finding a match between a request for data and cached data is referred to as a “cache hit.” The more likely a cache hit occurrence, the overall performance of processing system 100 is increased and data is provided to data consumers 135 in a more timely manner.

Please replace paragraph [0027] with the following amended paragraph:

[0027] Embodiments of the present invention are capable of implementing a variety of different eviction policies for both static cache 120 and dynamic cache 125. Both static cache 120 and dynamic cache 125 may implement the same eviction policy or different evictions policies, according to the task at hand. Similarly, embodiments including multiple dynamic caches may include dynamic caches implementing the same eviction policy or different eviction policies.

Please replace paragraph [0029] with the following amended paragraph:

[0029] Referring to FIG. 2, data cached within static cache 120 is called “stable data” and data cached within dynamic cache 125 is called “soft data.” The data cached within static cache 120 is referred to as stable data because it is less likely to be completely evicted from hybrid-cache 110, than data cached within dynamic cache 125. The data cached within dynamic cache 125 may be said to be “softly reachable” because it is less likely to remain cached than the data cached in static cache 120. The stable data and soft data may represent ~~may any~~ type of cacheable data, including objects of an object orientated language (e.g., Java), database files, archive files, application files, data files, and the like.

Please replace paragraph [0041] with the following amended paragraph:

[0041] If the demand for memory 105 exceeds the supply of free or available memory 105 (decision block 510), then dynamic cache 125 may need to contract to free up memory 105 for other uses, such as applications 115. Without contracting dynamic cache 125, applications 115 will not be able to expand and ~~[[an]] a~~ stack overrun or insufficient memory error may occur, else in some embodiments, applications 115 may need to be swapped to a hard disk of processing system 100, considerably slowing executing of applications 115. In this scenario, process 500 continues to a process block 520.